

REMARKS

Claims 1-38 are currently active.

Antecedent support for the amendments to Claims 1 and 20 is found on page 1, lines 20-25.

The Abstract of the Disclosure has been amended to be less than 150 words.

The Examiner has rejected Claims 1, 4-7, 9-15, 17-20, 23-26, 28-34 and 36-38 as being unpatentable over Presley and Masterson. Applicants respectfully traverse this rejection.

Presley teaches an enterprise computing environment 10, including a system for actively managing an enterprise of configurable components 11. The enterprise computing environment 10 comprises and intra-network 12 interconnected to an internetwork 23 via a gateway 24. The management system 11 configures, validates and manages configuration parameters of a plurality of systems interconnected over the internetwork 12, including a Web cache 13, Internet application servers and database servers. The database servers are

respectively coupled to relational databases to provide management and access to structure data records. See paragraphs 28 and 29.

The management system 11 automates and validates configuration changes to the run-time enterprise environment for the set of systems. The individual dependent relationships between the various enterprise components are managed by the management system 11 which utilizes a context that is based on impact analysis prior to validating proposed changes to the management parameters. See paragraph 30.

The individual computer systems are general-purpose, programmed digital computing devices. The management system defines a framework 30 that includes each of the individual network components, a management console and a management server. Each individual network component executes a client module on a Java virtual machine. The client modules access stored configuration parameters. Each said of the configuration parameters stores the values of the tunable configuration parameters for operating system, mid-tier and application software executing on that particular network component. See paragraph 32. The management console executes as a Web browser-based application that presents a user interface. The core of the management system is a management configuration module. The management console interfaces to a management server coupled to a database repository. The database repository includes a set of document-type definitions and a set a global parameters.

Each document type definition provides a master declarative definition of component parameters and dependent relationships for intra- and inter-platform software. Each document type definition identifies individual configuration parameters and defines a value type, value range and parameter reference relationships.

Operationally, the management configuration module 35 periodically probes the individual network components for new or changed network components. A management configuring module probes the individual network components to discover new hardware resources. The management configuration module implements the public application programming interface to invoke the various services needed to collect, validate and analyze individual configuration parameters. Upon discovering a new or changed component or server, the management configuration module 35 requests and receives the run-time configuration parameters from the corresponding client module. The management configuration module constructs a component parameter relationship dependency tree for use in impact analysis. Only those modules where a change has been discovered will be validated in an established enterprise. The management configuration module registers and validates each network component. The configuration parameters are validated against the master document type definitions maintained in the database repository. The master document type definitions allow the supporting of certified configurations by enforcing the configuration parameters as a configuration policy. Upon the completion of validation, the management

configuration module generates and distributes a run-time Doclet that describes the resources used by each server in the enterprise computing environment 10. See paragraphs 32-37.

The core services depend on four primary sources of input. The core services obtain the site-specific resource and component configuration by invoking probing service layers. The core services analyze, advise and correct out-of-bound and invalid configuration parameters and identify cyclic relationships. The attached appendices teach a document type definition, a Doclet and Doclet fragments. See paragraph 48.

The management configuration module includes two main components: configuration, validation and management and component-specific adapters. The configuration validation management is composed of the following parts: adapters, parser, configuration validator and analyzer, and service interfaces. The configuration validation management component can include multiple adapters and service interfaces to accommodate various forms of network components. The configuration validation management component accesses stored global parameter definitions, node resources, and component-specific parameter values. The global parameter definitions and node resources are maintained in the database repository accessible by the management server.

The management configuration module 35 can be invoked either via interactive access or automatic processing. When invoked via automation, the only service provided is component validation dependency checks to ensure that the pre-arrange configuration parameters are valid and that the dependent relationships hold true. Each module is a computer program, procedure or module written as source code. When actively managing an enterprise of configurable components, the management system is first initialized and then enters an iterative and continuous processing loop. During each iteration, all network components and servers are probed by requesting each client module to identify, register and validate any new or change components or servers. The component configuration of each newly discovered component is registered on the management server 32. Each individual component within the newly discovered configuration is iteratively processed as follows. During each iteration the run-time configuration parameters for each component are recorded into a doclet. The doclet are downloaded to the management server and are registered. The management configuration module will wait until registration is complete after which the configuration parameters are validated. If the configuration parameters are not validated, the unvalidated configuration parameters are processed. The doclet tags are used as a version control number.

Next the doclet is sent to the specific server for which the component configuration is defined. A specific server then ensures the configuration parameters are

applied by the client module. The run-time configuration parameters are stored into the database repository. See paragraphs 69-72. Thus, the configuration parameters are validated against the definitions retrieved from the database repository. Validation includes checking the value type and value range on any parameter reference relationships. Next, an impact analysis is performed. The impact analysis includes dynamically traversing the dependent relationship tree to ensure that the configuration policy is enforced. If the configuration parameters reflect change values, change management is performed, the unvalidated configuration parameters are processed by performing selected operations. First, an unvalidated but changed configuration parameter can be changed back to previously validated value or to a default as indicated in the global parameter definitions. Second, the management system can perform an audit over all of the configuration parameters to determine the effect of on validated configuration parameters. Third, an alert can be generated to an administrator.

Masterson teaches systems and methods for configuring and administering electronic devices. Masterson teaches that a wealth of options and features with these electronic devices are available but can only be accessed through a small, front-panel display and a limited number of buttons. A popular solution involves the use of peripherals, such as a television screen in a keyboard. These peripherals are ordinary too expensive and bulky to build into the product, so typically they are purchased separately. See paragraphs 6-8. This problem is addressed by an online system that facilitates the configuration and administration

of residential electronic devices. The online service comprises one of more servers coupled to the Internet to provide an online configuration service. The service includes a database of configuration information for the registered electronic device and provides a web page interface that allows owners of electronic devices to access and change the configuration information of their electronic devices. This web-based approach also provides an opportunity to businesses wishing to provide targeted advertising, direct sales of accessories or subsequent services to owners of electronic devices. See paragraph 9.

Masterson teaches a user can interact with the computer system via an input device and an output device that are coupled to the computer. The computer executes software stored internally or received from a communication media. A bridge logic device, also couples to a main memory array by memory bus and may further couple to a graphics controller. Computer 12 may be coupled to a network or to the Internet so as to access information stored on other computers. Conventional browsers present the user options in the form of a web page.

Masterson teaches a DAR having a loading door for musical media and a remote control. The DAR may typically be able to store hundreds and perhaps thousands of songs. The system facilitates the configuration and administration of residential electronic devices such as the DAR. The server provides an online service that allows the users to set up

an electronic device and to perform day-to-day control operations of the electronic device. A user can access the online service via any Web-compatible system that allows access to the server via the Internet. The server maintains a database of device configuration information that the user can access an altar and the device preferably accesses the server periodically to achieve any changes. A server provides an online device configuration and administration service for compatible residential electronic devices. It maintains a database of configuration information for each registered device, and it allows the device owner to interact with the database via a Web-based interface. The synchronization process may be carried out by the residential electronic device.

The synchronization process begins with a configuration check. If a configuration error is detected then the device connects to the server using a default connection. After establishing a connection the device sends an initial set of information to the server. The device is recognized by the server if the server has an existing account for the device. If so, the device retrieves from its account the latest configuration file. The device determines if there are any pending transactions. Examples of transactions include purchase and or download of information. In the context of the DAR, the user may initiate a purchase of a song or an album on the device.

If the device is properly configured, the device connects to the server using the program connection method. Ultimately, the server sends the updated configuration file to the device. Once all the transactions have been concluded, the server closes the connection with the device.

As is apparent from the teachings of Masterson, they are focused on a single electronic device where the configuration information is only directed to the electronic device itself. In regard to amended Claim 1, there is no teaching or suggestion that "the configuration information includes how the devices are connected to each other, the capacities and relative utilization of communication links of the network among the devices and faults and problems in the network." Similarly, Presley does not teach or suggest this limitation either. It is respectfully submitted that the Examiner is using the hindsight of the limitations of Claim 1 to find these limitations in the applied art of record and by simply finding the two different interfaces in the applied art of record, without any actual teaching or suggestion, concludes that the remainder of the limitations are obvious, even though they embody a significant advancement in the art. As the Examiner knows, hindsight is not the law let alone designing a system to be able to say that applicants' claimed invention is obvious. Consequently, because the Examiner is reading the limitations into the teachings of the applied art of record, Claim 1 is patentable over the applied art of record.

Moreover, patent law requires there be some teaching or suggestion in the references themselves to combine their teachings to arrive at applicants' claimed invention. Here, there is no such teaching or suggestion in the applied art of record to combine their teachings. For this reason also, Claim 1 is patentable over the applied art of record.

There is no teaching or suggestion, let alone any reason why the teachings that the Examiner relies upon in Masterson would be combined with the teachings of Presley to arrive at applicants' claimed invention. There is nothing in the teachings of Masterson which is focused on the electronic device itself and has nothing at all to do with any aspects of the network in regard to the configuration information that would cause one skilled in the art to even consider it in any way to use its teachings to modify the teachings of and in some way to arrive at applicants' claimed invention.

The context of Masterson is to maintain a single electronic device which is concerned only with itself in regard to the configuration information and not with any aspect of the network are at the devices of the network. The context of Presley has to do with the overall management of configurable components of a network, but does not provide the detail of concern about the specific configuration information, as found in Claim 1.

In addition, the context of Presley requires the use of doclets and a relationship tree specifically to carryout and practice the teachings of Presley. The teachings of Masterson, and the context of Masterson, have no need or use of doclets and a relationship tree. There is no reason why one skilled in the art would Presley in some way modify Presley with the teachings of Masterson to arrive at applicants' claimed invention as amended, or modify the teachings of Masterson with the teachings of Presley to somehow or other arrive at applicants' claimed invention

It is respectfully submitted in regard to the Examiner's comments in the Response to Arguments section that there always can be found some reason such as more efficiency or because it would be more inexpensive. However, the Examiner's reliance on the knowledge generally available to one of ordinary skill in the art is misplaced because the knowledge must be specific for the motivation in regard to the teachings themselves in the references. All the Examiner has done is come up with some very general reason that has nothing to do with the teachings in the references themselves.

The Examiner has rejected Claims 2, 3, 8, 16, 21, 22, 27 and 35 as being unpatentable over Presley and Masterson and Hasan. Hasan adds nothing in relevant part to Presley and Masterson in regard to applicants' claimed invention.

Claims 2-19 are dependent to parent Claim 1 and are patentable for the reasons Claim 1 is patentable.

Claim 20 is patentable for the reason Claim 1 is patentable. Claims 21-38 are dependent to parent Claim 20 and are patentable for the reasons Claim 20 is patentable.

In view of the foregoing amendments and remarks, it is respectfully requested that the outstanding rejections and objections to this application be reconsidered and withdrawn, and Claims 1-38, now in this application be allowed.

Respectfully submitted,

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